MAYA DATES[1]

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The more comprehensive paper I had prepared for this occasion was found to be too long. It is as well, perhaps, for the only general interest in my subject is as to just how old the Maya ruins are.

Many efforts have been made to satisfy that curiosity; they can be only guess-work, however, until the ancient Maya chronology is aligned with ours. But one possible way of doing this exists: that is, by correlating the Xiu and Archaic chronological calendars. There have been several attempts in that line, but those I have seen were based on mistaken premises and therefore must of necessity be wrong.

It is not certain the thing can be done even by the use of proper data; but as our only present hope of coördinating the Archaic dates with ours lies in such a correlation, I have deemed it worth while to make one as correct as possible.

There are two chief obstacles. If we could be sure they were overcome without violence, not a particle of doubt would remain.

The first is that the katuns were computed differently in the two systems — the Archaic reckoning by a cycle of 20 katuns, the Xius by one of 13; the former numbered in the order of their succession, the latter designated by their terminal day number.

But this objection seems to vanish in face of the fact that the Archaic system, in addition to its 20-katun cycle, had a 13-katun count also — specified for some reason as "the 16-day reckoning" — in which the katuns were designated by their terminal day number, exactly as in the Yucatec plan.

I will state here, by the way, that I have found good reasons in the inscriptions for revising my chronological calendar in one particular. The signs which I thought indicated the beginning really

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denote the end ; so that what appears in the tables as the first day of an ahau, katun, cycle, or great cycle is, instead, the last day of that period.   Fortunately the numbering is such that no change will be required in that respect.   The notation of dates will be exactly the same as now, only it will mark the end, not the beginning, of the periods recorded.   Thus the two calendars are brought into conformity in this important regard.

The second obstacle is that the annual calendars of the systems in question do not agree, there being a difference of one in the month numbers of the days.   But that difficulty also seems to disappear under examination.

It is certain the Xius migrated from a region where the Archaic calendar was in use, for the style of chronological reckoning they brought with them and preserved to the last does not accord with that of any other of the Maya branches, as the Quiches or Cakchiquels.

Now, what would likely happen when a people settled in a country where a different calendar was in vogue ?   As they came into intercourse with the older settlers they would naturally, for the sake of convenience, adopt the current day and year count, but retain their chronological one in order to keep their records unbroken.

It is evident that precisely this happened with the Xius in their new home.   Two of the chronicles state that " Pop was put in order " shortly after they came in contact with the Itzas.   As mention of this fact occurs only in the chronicles of the Xius, as they did not conform their chronological count to the standard of their neighbors, and as there was no necessity for any other change, this in all likelihood refers to their adoption of the Yucatec annual calendar.

Whatever period it may have been necessary to intercalate or cancel to effect this change — whether but a day, or years — one consideration had to be kept in view : the order of their chronological count must not be disturbed.

Now, that order did not consist merely of every katun ending with a number two less than its predecessor.   It involved the regular succession of seventy-three different month dates as well, any disarrangement of whose sequence would throw their chronology into

confusion. Hence, supposing the change to have been made at the close of a katun ending with 13 Ahau-17 Pop (as it was), the succeeding katun must terminate with 11 Ahau-2 Pax, however much it had to be lengthened or shortened in order to do so, else the whole Xiu chronological scheme would have been thrown into disorder.

That no other change was made is certain from the facts that the Xius did not align their katun count with that of the Itzas, Cocoms, and Chels, and that its character remained unaltered and its continuity unbroken from the time they left their mother-country.

The two main obstacles being thus disposed of with a reasonable assurance of certitude, the way is cleared for the next step, which is to identify some day of the Yucatec annual calendar with the corresponding one of our era.

Luckily two dates are given by the native writers with a particularity that renders their position unmistakable.

Dr Brinton states, in his *Maya Chronicles*, that one of the manuscripts (presumably in his possession) gives the year Montejo arrived at Chicchen Itza as 11 Muluc.

Nakuk Pech's "Chronicle of Chicxulub," in the same volume, says the year the Spaniards settled in Merida was 13 Kan.

These statements agree, which renders them reliable beyond cavil. We may be positive therefore that July 16, 1526, was the Yucatec day 11 Muluc, and July 16, 1541, 13 Kan.

The death of Napot Xiu, the *ahpula*, or priestly heir to the throne, is the event we must rely upon to fix exactly the terminal day of a Xiu katun. It is the reef on which all the chronologists have been wrecked.

The dates of other occurrences are given, but none so circumstantially as this. Besides, it was an important event in Xiu history, and would likely be carefully chronicled.

The chroniclers confused the account by attempting to give the year of our era. Like every other of our dates given by them, it is wrong. They were invariably misled by the difference between our years and their ahaus. But they all agree that the ahpula died on the day 9 Ymix, the 18th of the month Zip, in the year beginning with 4 Kan. As this was their own style of reckoning, there is every reason for supposing the date to be correct.

Now, 1541 being a Kan year (as the two authorities just men-
tioned assure us it was), it is impossible that 1536 — the year in
which it is said the ahpula died — could have been one also. It
was, in fact, the year 8 Cauac. The only 4 Kan year within a
reasonable range began in 1545.

The translators have confused the account of the ahpula's death
still more by construing one of the sentences so as to read : " For
six years the count of the 13 Ahau will not be ended," whereas it
actually says : " The sixth year will not end from the count of the
13 Ahau."

This makes a great difference and gives a very definite location
to the end of that katun. It could be only 13 Ahau-7 Xul, Oc-
tober 30, 1539. Counting by calendar years there would be five
years and fifteen out of their eighteen months to 9 Ymix-18 Zip,
September 11, 1545, the day the ahpula died ; reckoning by ahaus,
as it is likely the natives computed it, but nineteen days would be
lacking to complete the sixth ahau from the end of the 13 Ahau
katun. No other 13 Ahau would fit the conditions in either way,
while this fulfills them in both. But, to fortify its position, I will
cite some additional proof.

Landa states that the natives said the Spaniards arrived at
Merida during the month Pop, 1541, which was the first year of the
11 Ahau katun. This information must have come from the Xius,
for the 11 Ahau katun of the Itzas, Cocoms, and Chels began De-
cember 25, 1536.

The month Pop, 1541, was really in the second ahau of the Xiu
11 Ahau katun, as we would count ; but as periods were not reck-
oned by the Mayas until they had wholly elapsed, speaking of the
date in round numbers the natives would say it corresponded to the
first ahau.

It has been generally assumed, however, that this statement of
Landa and that of the chronicles (that the ahpula died in 1536,
when according to the mistranslation six years were wanting to
complete the katun) are strongly corroborative, and therefore the
13 Ahau katun must have ended in 1541.

The assumption, notwithstanding its outrage of arithmetic, seems
plausible in a vague sort of way ; but the chronicles themselves
upset it.

All the Xiu chronicles say Landa died in the 7 Ahau katun. By a chronological count based on the 13 Ahau katun ending October 30, 1539, the 7 Ahau katun would begin April 14, 1579, the very year and month in which Landa died; therefore any date more than seventeen days later than October 30, 1539, for the ending of the 13 Ahau katun would bring Landa's death into the 9 Ahau katun.

Thus the assurance given us by the annual calendar is made doubly sure, and we may rest certain that the 13 Ahau-7 Xul which fell on October 30, 1539, was the end of a 13 Ahau katun in the Xiu chronological count.

We now turn to the Archaic calendar for a katun ending with 13 Ahau-8 Xul, remembering we are supposed to have overcome the difference of a day. We must also keep in mind that owing to my rearrangement of the calendar it will be a date now at the head of a column.

Happily, in support of the correctness of the Xiu chronology, we find it in a very reasonable position — the 16th katun of the 11th cycle of the 54th great cycle.

Assuming that date to have been October 30, 1539 (as the foregoing considerations show there is just reason for doing), we are enabled to align every other date in the Archaic scheme and to fix at least the prosperous period of all the ruined cities.

The result shows that Copan, Quirigua, Tikal, Menche, Piedras Negras, and the other more modern capitals, flourished from the sixth to the ninth century of our era, speaking in round terms, and that Palenque was in existence 3,143 years before Christ.

I am aware that the older Palenquean dates are so remote that it has been commonly agreed to discredit their historical value. There is no warrant for this. They stand on exactly the same footing as the dates assumed to be historical, and all must be accepted or rejected alike.

But, apart from this general reason, there is definite proof of their historical value.

There are two kinds of initial dates in the inscriptions. One sort is merely a starting-point from which to project a computation

illustrative of some peculiar style of reckoning : as that on the east face of Stela C, Quirigua, demonstrating the ways by which a great cycle can be reckoned ; those on Stela C, Copan, showing a count by 4,680 years, or ninety calendar-rounds ; that on the steps at Palenque, and so forth.

It will be observed that this style of dates is never followed by what I termed "the initial directive series," but which the Harvard school designates "the supplemental series." This series — which, whatever we may name it, the Mayas called "the day reckoning" — was a computation by single days to 180, originally, but later to 200 ; thence, respectively, to 3,600 and 4,000 days ; but in both cases it led up to seventy-three 5-ahau, or 360-year, reckoning. It started from a different date in every city, and began with a different day in all of them except Copan and Quirigua.

There can be but one inference from this general diversity in a system where everything else was uniform — namely, that it was an *ab urbes conditâ* reckoning, showing the relation of the regular chronological count to one from the founding of each particular city. In other words, every city, in addition to the standard chronology common to the whole race, had a reckoning from the date of its founding — like Rome. Therefore it is reasonably certain that all the initial dates which are accompanied by this supplemental series are historical.

The earliest Palenque dates are not only followed by it, but it appears there in a form so radically different and primitive as to require a vast stretch of time, considering the conservatism shown in everything else, to account for its later development in the other cities. Hence, those dates are not only historical, but they bear an unmistakable badge of relatively great antiquity.

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